

AMENDMENT UNDER 37 C.F.R. § 1.116
U.S. Appln. No. 10/080,528

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (currently amended): A lateral force-measuring device for a wheel, comprising:
 - a rotator in frictional contact with the wheel, said rotator being operable to move in an axial direction when dependently rotated by a rotation of the wheel, ~~and;~~
 - a load-measuring device attached to a dog, the load-measuring device being operable to measure a moving load in an axial direction of said rotator when said rotator is rotated by the rotation of the wheel, wherein the moving load can be either of both a tensile load and a compression load; and
 - a wheel-driving device operable to rotate said wheel, wherein the wheel driving device comprises a throb motor operable to stably control the rotation of said wheel and prevent excessive force from being exerted on the wheel.
2. (previously presented): The lateral force-measuring device as claimed in claim 1, wherein said rotator is dependently rotated by a rotation of one of a pair of axially connected wheels.
3. (previously presented): A lateral force-measuring device as set forth in claim 1, wherein said rotator is attached to the dog and said load-measuring device is operable to measure a moving load of the dog.

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Claims 4 and 5 (canceled).

6. (previously presented): The lateral force-measuring device as set forth in claim 2, further comprising:

a wheel-driving device operable to rotate said wheel, wherein the wheel driving device comprises a throb motor operable to stably control the rotation of said wheel and prevent excessive force from being exerted on the wheel.

7. (previously presented): The lateral force-measuring device as set forth in claim 3, further comprising:

a wheel-driving device operable to rotate said wheel, wherein the wheel driving device comprises a throb motor operable to stably control the rotation of said wheel and prevent excessive force from being exerted on the wheel.

Claim 8 (canceled).

9. (previously presented): A vehicle inspecting system incorporating a lateral force-measuring device as set forth in any one of claims 1 to 3 and 5 to 7.

10. (currently amended): A lateral force-measuring method comprising:
pressing a wheel surface to a rotator;

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connecting a wheel driving device to the wheel;
stably rotating the wheel by controllably rotating the wheel driving device; and
measuring a lateral force exerted by the rotating wheel on the rotator by determining an amount of compression or tension exerted on a dog connected to the rotator;
wherein the rotator includes an angular shaft portion disposed inside of a roller, and bearing rollers anchored to the inside of the roller, said bearing rollers contacting the angular shaft portion to facilitate axial movement of the roller along a longitudinal axis of the angular shaft portion, so that said rotator is capable of moving in the axial direction.

11. (previously presented): The lateral force-measuring as set forth in claim 10, wherein the wheel surface pressed to the rotator is the surface of one of a pair of wheels axially connected together.

12. (previously presented): The lateral force-measuring device as set forth in claim 1, wherein the rotator includes an angular shaft portion disposed inside of a roller, and bearing rollers anchored to the inside of the roller, said bearing rollers contacting the angular shaft portion to facilitate axial movement of the roller along a longitudinal axis of the angular shaft portion, so that said rotator is capable of moving in the axial direction.

Claim 13 (canceled).

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14. (currently amended): A lateral force-measuring method comprising:
pressing a wheel surface of both of two axially connected wheels to a single rotator;
connecting a wheel driving device to at least one of the wheels;
stably rotating the wheels by controllably rotating the wheel driving device, and;
measuring a lateral force exerted by the rotating wheels on the rotator by determining an amount of compression or tension exerted on a dog connected to the rotator;
wherein the rotator includes an angular shaft portion disposed inside of a roller, and bearing rollers anchored to the inside of the roller, said bearing rollers contacting the angular shaft portion to facilitate axial movement of the roller along a longitudinal axis of the angular shaft portion, so that said rotator is capable of moving in the axial direction.